

UPPER COLORADO ENVIRONMENTAL PLANT CENTER
MEEKER, COLORADO
AND
USDA-NATURAL RESOURCES CONSERVATION SERVICE
LAKEWOOD, COLORADO

Planting Guide

SPECIES: 'MAYBELL' ANTELOPE BITTERBRUSH
Purshia tridentata (Pursh) DC.
9024373 (Alternate Number = EPC 1395)

USES: Antelope bitterbrush is one of the most important palatable native shrubs in the western United States. It provides important spring and winter browse for domestic livestock, antelope, deer, and elk. Its seed are also an important food source for small mammals.

"Maybell Source" is recommended for rangeland and wildlife habitat improvement plantings. Due to its layering habit, it is also recommended for erosion control on reclamation plantings. Its low growth form and attractive appearance also makes it a promising low maintenance landscaping plant with potential for xeriscape,

DESCRIPTION: The native deep rooted shrub is 24 to 40 inches tall and 36 to 52 inches wide. Leaves are persistent with small young winter leaves remaining on the plant through winter. The leaves are small (6 to 19mm long), wedge shaped, and three lobed. Leaves vary in color from grey green to bright green and flowers are mostly yellow. Flowering generally occurs from late June to early July. Seed ripens quickly (four to 10 days after bloom) and falls seven to 10 days after ripening. "Maybell Source" is a layering (lower branches develop roots when in contact with soil) low-growing form of antelope bitterbrush,

ADAPTATION: "Maybell Source" is adapted to moderately coarse textured, well drained soils where annual precipitation is 10 to 24 inches and at elevations of 5,000 to 8,000 ft. While the entire area of adaptation is not known, it should perform well in ecological zones similar to the collection site. The collection site is rolling sandhills of aeolian sands from Brown's Park sandstone. In addition, antelope bitterbrush often shows good adaptation to sterile soils. A beneficial organism (Frankia spp.), a nitrogen fixing endophyte, is associated with the plant.

ESTABLISHMENT: "Maybell Source" can be established from seed or transplants. Seedlings should be made in late fall or early winter for natural stratification. Seed should be planted about 1 inch deep in a firm seed bed. The "Maybell Source" has approximately 13,900 seeds per pound and should be planted at a rate of 1/2 to 1 pound of pure live seed per acre. Transplants should be planted in early spring to take advantage of winter moisture. Young plants have only average vigor which contributes to slow establishment. The control of aggressive plants is important in new plantings for stand establishment.

MANAGEMENT: "Maybell Source" seedlings and young tublings need protection from use by livestock, wildlife and rodents for up to 4 years. Once established, stands of the "Maybell Source" are relatively persistent. However, mature stands may require protection from excessive use to avoid loss of vigor that will lead to plant mortality. Fire management is also important since the plants contain resins that readily burn,